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A TECHNICAL PAPER ON THE IMPROVEMENT AND DEVELOPMENT OF TRAINING FACILITIES AND PROGRAMMES IN THE FIELD OF HUMAN SETTLEMENTS IN AFRICA

LC/NAIROBI

I. INTRODUCTION

1. African countries adopted a global approach to human settlements planning only recently. During the colonial period only the cities were planned, and even so such planning invariably covered only those areas of the cities that were of special interest to the colonizers. One could hardly speak of town and country plannings. During their first two decades of independence, the new States were mostly concerned with establishing new structures to meet their development requirements and training appropriate manpower to manage such structures. Today African countries still need to develop their human resources in order to ensure overall development and social progress.

2. The Lagos Plan of Action underscored the need for qualified manpower in the various productive sectors and in logistics. In view of the immense training requirements, the lack of adequate training facilities in some areas and the shortage of financial resources, African Heads of State had recommended that meaningful co-operation be established among African States so as to facilitate the establishment of regional, subregional and multinational specialized training and research institutions whenever possible. Such specialized institutions should be built around existing national institutions.

3. Concerted action is required to train quality personnel at all levels and in all educational and training systems in order to achieve a rational socio-economic development in the field of human settlements. Some of the essential components of such action are the establishment of an institutional machinery framework and the reform of educational and training programmes. Although it is essential to train specialized staff in the various aspects of human settlements, it is equally important to make sure that those non specialists such as administrators, decision makers, planners, economists, engineers and other professionals such as technicians, managers and skilled workers who have to take decisions having an impact on human settlements are fully aware of all the facts. Such a strategy would enable human settlements issues to influence the decisions that form the basis of national economic and social development plans.

4. Over the past few years, some African Governments have looked into the shortage of qualified manpower. They came to the conclusion that even though financial resources and means of production were necessary to successfully implement development plans, it was even more important to have qualified personnel for the various sectors of the national economy. In fact most developing countries may conclude that the shortage of qualified personnel is a fundamental obstacle to the proper implementation of their development projects.

5. The shortage of qualified personnel in human settlements has been discussed at many meetings, particularly the fifth Session of the Human Settlements Committee, the first congress of the special general assembly of the Union of African Architects and the first meeting of the Joint Intergovernmental Regional Committee on Human Settlements and Environment. More recently, at its fourth meeting, the Joint Intergovernmental Regional Committee adopted a resolution on human settlements which requested the Executive Secretary of ECA and the Executive Director of UNCHS (Habitat) to promote the development of human resources to meet the requirements of the human settlements sector.

6. The present technical paper reflects the comments made on the report submitted by the ECA secretariat to the fourth meeting of the Joint Intergovernmental Regional Committee on the same subject, highlights the main aspects of personnel training in the area of human settlements and identifies the potential for co-operation between institutions, countries and international organizations with respect to training in the area of human settlements.

II. THE ROLE OF HUMAN SETTLEMENTS IN DEVELOPMENT

7. In underdeveloped countries in general, differences in the level of development between regions and the backwardness of some regions as compared to others within the same country have been used as a basis for launching many projects. Often, no workable regional studies happen to have been prepared. Space does not appear to have the same economic and social value everywhere. The possible combinations of factors, cost and resistance of people change from place to place in the same country. Most African countries have therefore had to prepare economic and social development plans as a means of reducing the gaps between regions, promoting speedy industrialization and diversifying their economic structure.

8. The aim of economic and social development plans is to expand national economies, increase incomes and living standards of the people, create jobs in all sectors of the economy and improve the quality of life of the people.

9. Major communications infrastructures, transport networks, public facilities and industries come into being as these objectives are achieved and contribute to opening up peripheral regions through the establishment of appropriate services.

10. At the same time as economic development and higher standards of living are achieved, spontaneous waves of migration will begin and intensify. Towns will develop as a result of urbanization creating problems of space organization because of the need to build houses, establish communications and transport channels as well as various networks (water supply, sewage, electricity, telephones ....).

11. Such major economic changes will create great imbalances between regions, towns and villages and chaos in the distribution of facilities, housing infrastructures and population if no deliberate effort is made to bring in some order.

12. Human settlement planning should be introduced into this process in order to find workable solutions in the organization of economic space, the use of sites and the sensible distribution of activities over space. In this way, human settlement planning becomes a tool for organizing economic and social development. By seeking the best possible adaptation of society and economies to space, it shapes the image of the country and becomes the long-term spatial manifestation of a country's development effort.

13. For a long time, human settlements in Africa were subjected to development efforts more than they were genuinely associated with those efforts. The efforts of the Joint Intergovernmental Regional Committee on Human Settlements and Environment and the determination of African States to tackle their development

problems by implementing the principles and guidelines defined in the Lagos Plan of Action, have resulted in a re-definition of space organization objectives. Among the priority areas that require immediate action in Africa, the Lagos Plan of Action provides for better planning of towns and villages in terms of space allocation for facilities and the preparation of rural development projects using appropriate technology to stem the rural-urban drift and bring about a balance between rural and urban areas to better meet the requirements of economic development.

14. African States have certainly invested considerable efforts in developing human settlements but, inspite of everything, human settlements are still major sources of concern in Africa. The social and economic crisis and the deterioration in the ecological system underscore the problem. The bulk of the African population still lives in rural areas and the urban population is constantly on the increase. In almost all African countries, the ratio of urban income to rural income is 2:1. In some countries (Burkina Faso, Lesotho, Swaziland, Kenya, Senegal, Nigeria and Gabon), the ratio is between 4:1 and 8:10. While the annual birth rate of the African population was close to 2.9 per cent between 1970 and 1980 and 3.1 per cent between 1981 and 1983, the urban population was growing by 6 to 8 per cent per year. At the subregional level the rate of urban population growth is 8 per cent on the average in Central Africa, 7.7 per cent in West Africa, 7.2 per cent in North Africa and 5.6 per cent in Eastern and Southern Africa. 1/

15. This situation poses serious problems to African governments in terms of both their economic structures and their resources particularly in the production of housing units, facilities and public services. Poor spatial planning results, among other things, in considerable portion of the African urban population living in shanty towns, the rural-urban drift and some countries moving people from one area to the other.

16. The rapid growth of the urban population and steady migration of rural populations to the towns perpetuate not only poverty but also increase underemployment, increase the demand for housing, aggravate transport shortages and the shortage and inefficiency of infrastructures and social services. There are very few African countries where 30 per cent of households have running water and a sewage system. Poor human settlement planning is the reason why there are environmental pollution problems and why cities are developed on farm land and forest areas.

1/ UNCHS, Human Settlements in the Critical Economic and Social Situation in Africa: the responses of UNCHS (Habitat) April 1985.

17. The above situation calls for widening the scope of human settlement training to include systematic analysis of various problems and critical and objective studies on the current situation and teaching on: the relevance of theories on organization, communications and decision-making, concepts of adaptability as well as awareness of the requirements of the environment and the links between development and environment.

III. THE CURRENT STATUS OF TRAINING IN HUMAN SETTLEMENTS

18. The survey conducted by ECA in 1982-1983 and 1985 showed that there were a number of training institutions. Most of them form part of national universities and often have an intake capacity designed to cater for national needs. However, most of the national institutions admit students or trainees from other countries without any registration fees through bilateral co-operation. Thus, in 1984/1985, 52 per cent of the students of the L'Ecole d'architecture et l'urbanisme de Dakar, Senegal, were foreigners from Mauritania, Mali, Guinea, the Central African Republic, Niger, Burkina Faso, Burundi, Rwanda, Morocco, Tunisia, Lebanon, and France. In Morocco, about 14 per cent of the students registered during the 1984-1985 academic year at the Institut national d'amenagement et d'urbanisme de Rabat were foreigners and came from Mali, Gabon, Zaire and Tunisia. In Tunisia, the Institut technologique d'art, d'architecture et d'urbanisme de Tunis admits students from Morocco, Algeria, Cameroon and Cote d'Ivoire.

19. Although the following table is not exhaustive, it provides an idea of where training institutions are located in some African countries.

Country	Institutions	Duration of training
Algeria 4/	- Université de Constantine	4 years
	- Ecole Polytechnique d'architecture et d'urbanisme d'Alger	
Botswana 5/	- Institute of Development Management, Gaborone (Botswana, Lesotho, Swaziland)	6 years
Cameroon 5/	- Ecole Nationale supérieure des travaux publics, Yaoundé	2 years
Egypt 2/	- University of Cairo	4 years
Ethiopia 2/	- Higher Technical School of Municipalities, Addis Ababa	3 years
	- Senior town planning technicians	5 years
	- University of Addis Ababa, Faculty of Technology	5 years

Ghana 3/ and 5/	- University of Ghana, Legon School of Administration, Accra	
	- University of Cape Coast, Faculty of Social Science	4 years
	- University of Science and Technology, Department of Housing and Planning Research, Kumasi	3 years
Kenya 1/ and 5/	- University of Nairobi, Department of Land Development, Department of Rural and Urban Planning.	3 years
	- Kenya Institute of Administration, Nairobi	
Lesotho 5/	- Lesotho Institute of Public Administration, Maseru	Short duration
Mozambique 1/	- Eduardo Mondlane University, Institute of Cultural Studies, Maputo	4 years
Morocco 4/	- Institut national d'aménagement et d'urbanisme, Rabat	2 years
Nigeria 3/ and 5/	- Administrative Staff College, Lagos	short duration
	- Ahmadou Bello University, Department of Urban and Regional Planning, Faculty of Environmental Design, Zaria	4 years
	- Kaduna Polytechnic, Kaduna	
	- Nigerian Institute of Management, Lagos	short duration
	- University of Ife, Ile-Ife	4 years
	- University of Lagos, Faculty of Environmental Design, Lagos	2 years
Senegal 4/ and 5/	- Ecole nationale d'économie appliquée Dakar	3 years
	- Ecole d'architecture et d'urbanisme, Dakar	6 years
	- Techniciens supérieurs en architecture ou en urbanisme, Dakar	2 years
	- International Association for Environment and Development in the Third World (ENDA), Dakar	short duration

Country	Institutions	Duration of training
Tanzania 1/and 5/	- ARDHI Institute, Department of Urban and Rural Planning, Dar-es-Salaam	3 years
	- Centre for Housing Studies Dar-es-Salaam	short duration
	- Eastern and Southern African Management Institute, Arusha	short duration
Togo 5/	- Ecole africaine et mauricienne d'architecture et d'urbanisme, Lome	5 years
Tunisia 4/	- Institut technologique d'art, d'architecture et d'urbanisme, Tunis	7 years
Zambia 1/ and 5/	- University of Zambia at Ndola, School of Environmental Studies, Kitwe	5 years
Zimbabwe 1/	- University of Zimbabwe, Faculty of Civil Engineering and Department of Rural and Urban Planning	

Sources:

1/ Replies to the 1982-1983 ECA questionnaire on appraisal of the needs of the physical planning sector in Africa.

2/ International Handbook of Universities - English edition, 1981.

3/ Commonwealth Universities Yearbook, 1975.

4/ Mission to Morocco, Algeria, Tunisia and Senegal in 1985.

5/ Villes - Horizons 2000, Vol. 10, No. 5, May 1986.

20. The following table taken from the 1982-1983 ECA survey indicates where national human settlement experts in some African countries have been trained.

Country	Africa	Other regions
Ethiopia	-	Italy, France, United Kingdom, Hungary, Bulgaria, Cuba, USSR
Guinea	-	Eastern countries
Kenya	Kenya	United Kingdom, United States of America, Poland
Lesotho	-	Canada, United Kingdom, Australia
Malawi	Kenya	United Kingdom, Australia, United States of America, New Zealand, Poland
Mauritius	-	France, United Kingdom
Mozambique	-	Cuba, Portugal, Italy, German Democratic Republic
Swaziland	Kenya	United States of America, Australia
Tanzania	Tanzania, Kenya	United Kingdom, United States of America, India, Canada, Australia, Poland, the Netherlands
Uganda	Kenya	Poland, Commonwealth countries
Zambia	-	United Kingdom, Australia, Canada, United States of America, New Zealand
Zimbabwe	Zimbabwe	United Kingdom

21. Training in human settlements may be considered from the standpoint of financing, organization and administration.

22. The establishment of a national institute for training in human settlements raises comparatively serious financial problems both with regard to setting up and operating the institution. The financial aspect is less significant when the institution happens to be a multinational undertaking which has the added advantage of diversity in its research programmes. The cost of training is even less when carried out under bilateral arrangements in which certain developed countries or specialized United Nations centres provide fellowships and places for African students at their training centres. However, even though such training may be free of charge, it is often unsuited to the social and economic situation in African countries.

23. The main organizational problem is that of working out training programme contents and objectives in order to adapt them to national economic and social conditions. What is more, competent staff must be found to teach theoretical subjects and conduct practical work. Because the number of African experts who can provide such training is small, expatriate staff have to be recruited and they must in turn adapt their teaching methods and manuals to local conditions.

24. At the administrative level, the status of physical planners is crucial if such graduates are to be maintained in the public sector so that they do not drift into other sectors that offer more interesting prospects. Working conditions should provide possibilities for promotion and career development. It might be advisable, as happens in some countries, to give physical planners a special status that goes with appropriate remuneration, responsibility and career development opportunities. Physical planners must be made to feel that they are needed and that they have a role to play in contributing to the National development effort.

STAFFING NEEDS

25. African countries should try to integrate plans for economic and social development into their plans for human settlements development. This can be done only if special emphasis is placed on the training of the staff needed to design and implement such plans. African countries suffer from a substantial deficit of specialists in human settlements. In 1982-1983, ECA conducted a survey of needs with respect to staff working in the human settlements sector; the results are tabulated as follows:

Country	Planners working in the human settlements sector		Support staff			
			Cartographers/Draughtsmen/Plotters		Topographers	
	Number	Needs in 20 years	Number	Needs in 20 years	Number	Needs in 20 years
Algeria	-	3 015	-	-	-	165
Ethiopia	61	70*	21	-	12	-
Guinea	-	-	15	35	10	21
Kenya	94	450	83	950	23	410
Lesotho	7	30	14	104	16	68
Malawi	21	110	19	56	-	-
Mauritius	11	-	20	-	40	-
Mozambique	5	120*	13	-	5	-
Uganda	17	580	18	212	-	-
Tanzania	104	1 080	450	19 300	300	2 660
Swaziland	1	32	1	38	-	2
Zambia	13	450	129	600	66	400
Zimbabwe	33	355	16	260	2	20
Total	450	6 162	809	21 555	564	3 746

* Projections cover five years.

26. The needs expressed by countries as indicated in the above table show to what extent African leaders are aware of the role and place of human settlements in economic and social development. Rapid population growth in African countries has combined with the difficulty of checking the growth of major towns and the need for harmonious national development to make African officials attach greater importance to the planning of human settlements.

27. The analysis of the table above shows the wide gap between staff available and staff needs in 20 years' time. As far as planners working in the human settlements sector are concerned, the countries covered by the table need 14 times their current strength and, for support staff, the needs are 13 times those of the currently available staff. The table is self-explanatory and clearly shows requirements for staff working in the human settlements sector.

28. Training policies should adequately reflect the changing society as evidenced not only by population, urbanization and migration but also by the level of economic growth and the development of technology. What society requires are programmes which bear directly on local problems.

29. In the latter regard, it would be optimistic to think that the course content, text books, training materials and equipment used in formal academic programmes would change overnight to achieve the above-mentioned objectives. Africa is a net importer not only of materials, machinery and construction equipment but also of text books, training materials and personnel. This situation is most likely to remain unchanged for a long time. It could be concluded therefore that for the near future, a practical approach to orienting training programmes to bear directly on local problems would be short courses for practising personnel. This would have several advantages particularly the following:

- case studies would be selected from the local environment to test the relevance of theories;
- since technology is changing continuously, participants could familiarize themselves with new equipment, machines, tools and materials;
- a forum would be created for the exchange of ideas and experience.

30. It should be noted that human settlements cover a wide field and that the bulk of the personnel engaged in the sector might not have had relevant training.

31. From the above, it could be stated that Africa requires an additional level of training which should be a necessary complement to formal education that leads to the award of certificates, diplomas or degrees. This level of training would be designed for technicians and specialists working in the human settlements sector. Such a training programme would therefore concentrate on a specific objective, i.e., narrowing the gap between practical experience and formal classroom education which, although very necessary to provide theoretical and technical background, could at the same time be irrelevant to local conditions since most text books, training materials and even case studies might be based on the experiences of developed countries.

V. IMPROVEMENT OF TRAINING FACILITIES

32. Traditionally, urban and regional planning involved the integration of the various components related to the physical and spatial aspect of such planning and to architecture and engineering. This view lasted for many years until it became necessary to widen the scope of the theory and practice of human settlement planning to include aspects other than those of the physical, spatial or territorial environment. Variables relating to social and economic as well as administrative and political aspects were introduced. The development of social sciences and the fact that several disciplines are involved in human settlements have contributed to broadening the scope of human settlements development without losing sight of the physical and spatial aspect.

33. Human settlement planning is a relatively new discipline. In developing countries, physical planners often use techniques and strategies designed for developed economies which they have to adapt to the economic and social conditions of their countries. Highly qualified and trained graduates of higher educational institutions in developed countries, therefore, need to come down to earth and get to grips with conditions prevailing in Africa in order to adapt their expertise and resources to the specific problems of their developing countries. This also applies to the most experienced experts who come from developed countries to assist developing countries.

34. As noted in the preceding section, the demand for physical and urban planners in Africa far exceeds the supply. And yet this is the type of personnel whose numbers should be increased constantly. For human settlements plans to be implemented effectively, sufficient numbers of competent and trained physical planners are required.

35. Since the university training prior to entry on duty is generally theoretical, practical experience and familiarization with conditions prevailing in various development sectors of the country would have to be acquired. Beginners should be given practical training through organized field visits to developing areas.

36. Physical planners should be capable of initiating new ideas and innovating techniques to solve the specific problems which they are called upon to tackle. Introductory courses, courses of studies and organized visits to other countries all provide physical planners with so many opportunities to acquire this orientation.

37. Another issue of concern regarding training policies is that most African countries still depend upon overseas facilities to train human settlements personnel. A report of the United Nations Centre for Human Settlements 2/ indicates that most countries in the Eastern and Southern African subregion do not provide formal training leading to an official diploma in most areas of the human settlements sector. The dependence upon training facilities in industrialized countries leaves much to be desired due to:

2/ Survey of Training Needs for the Development and Management of Urban Settlements in the Preparation of a Strategy for Training Support for Countries in the Eastern and Southern Subregions of Africa, UNCHS, January 1983.

- the irrelevance of the syllabuses;
- inappropriate standards and technology;
- the fact that no account is taken of the community within which the trainee would eventually work.

38. Such shortcomings render the policy of training professionals abroad quite ineffective. The usual concern of African Governments is whether there is sufficient domestic need for the specific skill to warrant the institution of such training programmes. This concern argues in favour of the establishment of regional training facilities.

39. Another reason why there are problems in establishing policies and programmes in human settlements in Africa is the absence of any comprehensive training programmes in human settlements. There is an inter-relationship between the various fields of human settlements which has to be reflected in all human settlement training programmes. In that respect, it is worth mentioning the efforts made by the Kingdom of Morocco in offering courses of studies at the Institut National d'aménagement et d'urbanisme (INAU) of Rabat. There is a need to establish a training course. The motives and arrangements that result in the establishment of a training programme should always be borne in mind. The establishment of such a programme should stem from the need to give a new direction to human settlements (introduction of new planning techniques, determination to control development and new management methods, etc.).

40. In fact, the action to be taken will have to be defined. The use of public or private facilities has to be planned according to the tasks they will need to carry out and their resources. Such analysis should determine the type of staff required; their training should be defined in terms of theoretical and practical knowledge and in terms of their behaviour (public relations, etc.). The establishment of human settlements training facilities should respond to such criteria.

41. The important thing here is the quality of existing ties between the training institute and management of the staff trained. Training institutes can be constantly improved only if they have very strong ties with professional circles. A successful example of links between training institute and user services is the organization of teaching at the Ecole nationale d'économie appliquée of Senegal and the Institut national d'aménagement et d'urbanisme of Morocco. It appears to be particularly important for African human settlements institutions to be able to exchange information with each other and thus be able to work out joint policies.

42. In the debate concerning the orientation that the training of physical planners should take, some people maintain that specialized training programmes not exceeding one year would be appropriate. This obviously means that trainees should have had some basic training in one of the disciplines essential to physical planning, namely economics and geography. The trainees would then be made to acquire the necessary knowledge that would enable them to analyze economic phenomena in relation to the transformation of space. Other people support the idea of a long training period with a programme spread over several years and covering theoretical courses and practical field work.

43. Whichever principle is adopted, training programmes should be aimed at making students understand the significance of physical planning, the tasks involved and the use of analytical methods in finding practical solutions to problems relating to the harmonious development of specific geographical areas.

44. The contents of training programmes will vary in accordance to the specific socio-economic features of each country. However, it would be helpful to bear in mind a certain number of basic facts when preparing such programmes:

(a) Training needs vary from country to country in accordance with the specific features of each country and the amount of financial resources available;

(b) The content of training courses should take into account the socio-economic situation of the country concerned and its geo-physical features;

(c) Training programmes should be inspired both by the specific requirements of various physical planning disciplines and by the relationship existing among those disciplines. One objective of training courses is to enable physical planners to understand and grasp the inter-dependence of the various areas of development;

(d) In terms of content and spirit, training courses should take local conditions into account. Specific case studies, methodologies and research should be designed on the basis of the kind of environment in which students will be working;

(e) Training programmes should comprise a judicious mixture of theory and practice;

(f) The training should develop team spirit among planners and an ability to work within a group because their job involves inputs from experts in various disciplines;

(g) The level of training courses should be the highest possible.

45. Generally, training courses should be designed to give students the knowledge and skills that will enable them to:

(a) Establish a methodology in order to combine the inter-disciplinary elements needed to maximize development needs;

(b) Harmonize varying views into acceptable development objectives;

(c) Institute mechanisms for mobilizing people and resources for development projects;

(d) Formulate useful development indicators;

(e) Formulate policy instruments for attaining objectives;

(f) Gain a perception of the dynamics of space organization programmes on the basis of the distribution of activities and human settlements and the relations between them;

(g) Understand the methods that can be used in managing programmes and projects;

(h) Evaluate the progress of programmes, projects and planning as a whole.

46. In every case, physical planning staff at all levels should receive periodic training in the form of seminars at research institutes. Such courses should be specialized and at the same time geared to the needs identified in the profession. To the extent possible, such seminars should be organized subregionally so that they can at the same time provide a forum for the profitable exchange of experiences.

VI. ORGANIZATION OF TRAINING

47. It is obviously difficult, within the currently prevailing economic situation, to propose a formula that would be satisfactory at all levels. The economic situation of African countries, coupled with the financing required to manage and operate higher educational institutions, make it difficult for countries to support such institutions. Generally, there are three ways in which training would be organized:

(a) National institutions could be created. As has just been indicated, the running of such institutions weighs heavily on the budget of African States. Existing national institutions are maintained with difficulty. The uncertainty as to the profitability of national institutions set up to meet the needs of individual countries only should also be noted;

(b) Subregional institutions could be created. This solution has the advantage of being profitable for all countries concerned. The management and operating costs are borne by the countries. The organization of training for staff is better planned. This is a desireable solution if countries happen to respect their commitments in managing the institution. This is all the more important since many subregional institutions are experiencing serious difficulties because States fail to honour their commitments;

(c) Staff could be sent outside Africa for training. This is what has been happening in most African countries to date. Some countries outside Africa provide facilities in the form of bilateral technical assistance programmes, fellowships and so on. This is, first of all, a less expensive option but it has the disadvantage of producing physical planners who have been trained in a social, economic and political environment different from that of Africa;

(d) The ECA survey also revealed that most national training institutions in Africa accept students from other African countries. Under the circumstances, even if the host country demands some contribution, it is seldom as much as what would have been required under an inter-State institution. The countries of origin are fairly comfortable with this situation. But the host countries might find things difficult when they are obliged to expand infrastructures previously designed to meet national needs. The advantage of this approach is that it might lead to the conversion of the institution into an inter-State facility.

A. Training institutes and programmes

48. Human settlements training institutes and programmes in Africa are very few and even non-existing in some countries or at the subregional and regional levels. Many African countries are still largely dependent on a few developed countries for the training of the necessary professional and para-professional manpower. However, some attempts have been made in the last decade to develop training programmes at the national, subregional and regional levels.

49. Training and research institutions based in developed countries such as the United Kingdom, France, Germany, the Netherlands, Belgium, the United States of America and Canada provide a range of courses of varying length in different aspects of human settlements development for African students. Similarly, training and research institutions in other developing countries such as India, Thailand, Mexico, Chile and China also offer courses for African students as part of technical and educational co-operation agreements between developing countries.

50. Training and research institutions within Africa such as in the United Republic of Tanzania, Kenya, Nigeria, Ghana, Togo, Senegal, Algeria, Morocco, Tunisia, Egypt, Zambia and Angola also offer training courses and areas of research. Most of these training programmes have only just been started and, in some cases, are being developed jointly with the institutes of developed countries; such is the case of the Institute for Housing Studies (IHS) of the United Republic of Tanzania which is a joint venture of the Government of Tanzania and the Centre for Housing Studies (Baucentrum) of the Netherlands.

51. A number of international organizations and development agencies such as the United Nations Centre for Human Settlements (UNCHS), the Economic Development Institute (EDI) of the World Bank, the United States Agency for International Development (USAID), the Institute of Planning and Economic Development (IDEP), the United Nations Economic Commission for Africa (ECA) and ENDA have organized training courses, workshops and seminars either at the international level and national or regional levels.

52. The aim of most of the training and courses is to train professional and para-professional manpower. There are only very few on-the-job training programmes for low-income urban families who are beneficiaries of low-income housing development projects at the local and community levels. However, attempts are being made to promote and implement such training programmes within specific projects such as the Government of Zimbabwe/UNCHS low-income housing pilot projects, the Government of Zambia/World Bank Squatter Upgrading Projects in Zambia. In addition to these national efforts, many non-profit making organizations and non-governmental organizations such as the Institute for Cultural Affairs of Kenya, the International Co-operation Alliance in the United Republic of Tanzania, ENDA in Senegal and the Pan-African Institute for Development (PAID) offer on-the-job training, advice and information.

53. From observations of existing training institutes and programmes in developed countries and developing countries outside Africa, it is possible to identify some common issues pertaining in particular to programme relevance and shortcomings, development of programme contents, duration of courses and co-operation with respect to training. The following is an overview of these issues:

(a) Relevance

(i) Very few African countries have carried out national training needs surveys, showing the demand and the supply of professional and para-professional manpower in the field of human settlements development.

(ii) Existing courses both in developed countries and developing countries are aimed at training high and middle-level professionals with hardly any attempts to train supporting para-professionals or project management and implementation specialists;

(iii) With the exception of some recent pilot projects, there are hardly any training courses or on-the-job training of urban low-income families with respect to community participation, construction technology, housing administration and financing;

(iv) There is a serious shortage of appropriate teaching materials such as case studies, text books, research reports, information documents, audio-visual equipment at all levels of training particularly in the training of the beneficiaries of sites and services schemes, urban planning specialists and political officials.

(b) Shortcomings

(i) Training facilities, in terms of buildings, equipment and transport, trainers as resource persons, finance, etc. at the country, subregional and regional levels need to be expanded and given higher priority.

(ii) The cost of training in developed countries, even though in most cases supported by fellowships and research scholarships, is rapidly increasing and often requires foreign exchange and has resulted, in some cases, in the under-utilization of the training institutions and courses;

(iii) On-the-job training through pilot demonstration projects and technical co-operation programmes is extremely limited.

(c) Development

(i) Research and development programmes are not adequately linked and co-ordinated with the training and information programmes at all levels in most African countries;

(ii) Reorientation of trainers and curricula to meet the growing basic needs of the urban low-income families with respect to urban and housing development is urgently required;

(iii) Documentation and information dissemination programmes to serve the majority of the people through the mass-media (radio, television, films, newspapers and magazines in local languages and mobile units) need to be promoted and expanded.

(d) Co-operation

(i) Co-operation in the area of training urban planners, housing officers and other human settlements personnel in Africa is at an early stage and needs to be consolidated through subregional and regional programmes;

(ii) Subregional, regional and interregional organizations and institutions such as the Southern Africa Development Co-ordination Conference (SADCC), the Organization of African Unity, (OAU), Economic Commission for Africa (ECA), the African Development Bank (ADB), the World Bank, USAID and United Nations Centre for Human Settlements (UNCHS) can play a greater role to make effective the utilization of limited resources available for training in each country

(iii) Co-operation between African regional institutions and institutions in other developed and developing regions can be increased to train trainers and make local institutions autonomous and self-sufficient in the long run.

3. On-the-job-training

54. On-the-job training is always needed to teach decision makers and professionals new techniques. Such training should be done in the form of national, subregional and regional seminars. The United Nations Economic Commission for Africa and the United Nations Centre for Human Settlements have organized such training seminars. This type of training may be addressed to several socio-professional categories, particularly, managers responsible for implementing human settlements policies, professionals, municipal administrators and leaders of local communities.

(i) Training of managers

55. The United Nations Educational Scientific and Cultural Organization (UNESCO) and the United Nations Environment Programme (UNEP) at a joint seminar organized in July 1977, 3/ had considered human settlements training requirements in developing countries and had noted that there was a pressing need for training managers of human settlements departments. The training seminars should be organized in such a way as to permit participants to understand the usefulness of making a systematic analysis of data before taking any decisions relating to human settlements planning, project management and public relations. The seminars will also afford participants from various agencies the opportunity of strengthening their working relations. Such seminars will be organized at the subregional and regional level.

3/ UNESCO-UNEP, Human Settlements Managers Training Programme, July 1977

(ii) Training of Professionals (planners and technicians)

56. The aim of this course is to supplement the training of professionals working in the public sector; it should make it possible to initiate professionals, within a relatively short time, to the methods and procedures that are not generally dealt with in-depth in regular university curricula. The courses will be organized as three to four week seminars or workshops covering theoretical courses and practical exercises. The courses may be organized at the national, subregional and regional levels.

57. The subjects treated at the seminars could cover human settlements planning, project management and protection of the living environment.

58. In this type of seminar, participants should be taught: methods of identifying collective needs and available resources; how to prepare, evaluate and manage projects as well as collective participation.

(iii) Training of municipal administrators

59. Seminars for municipal administrators should focus mainly on organizational matters, town planning documents, operational town planning, project preparation, administration and evaluation. Such skills are crucial for municipal administrators. The seminars could be organized at the national level.

60. The seminars will give administrators the opportunity to exchange experiences on local planning, municipal organization, mobilization of municipal resources, collective participation in project implementation and municipal administration.

(iv) Training of local community leaders

61. Local community leaders have to have skills in all areas that help to develop social productivity. Seminars for community leaders should focus on how to identify social needs, local administration, collective participation and methods of communication. The courses should cover aspects essential to the preparation, evaluation and administration of projects: identification of the economic and social aspects of a project, developing the organizational capacity of a community through the implementation of local development plan objectives, teaching on national legislation and the organization of institutions to facilitate co-ordination with national plans and projects. Such courses could be organized at the provincial and national level.

62. Human settlements cover areas which require the participation not only of professionals and political leaders but of the people as a whole. It would therefore be important to sensitize the people by including the essential aspects of those areas into the sylabuses of primary and secondary schools and universities. This would certainly be the best way of making future citizens aware of the need to make a collective effort to improve the environment of human settlements.

(v) Training of trainers

63. It seems paradoxical to think of training trainers but it is also valid to state that a high level of university education is not enough to lecture in a field as new and complex as human settlements. A good teaching style and sound practical knowledge are required to give professionals sound training.

64. One of the best methods for a lecturer to acquire fresh knowledge on teaching methods and general knowledge is to keep abreast of the research findings of other institutes. Professionals should participate in seminars for trainers in order to provide the latter with evidence of the practical value of some theories and to engage in fruitful discussions on experiences. A critical assessment of teaching methods should be made as should research on the relationship between methods and results, the role of planners and technicians working in the area of human settlements should also be redefined. Such seminars should be organized at the subregional and regional level.

C. Training of skilled workers

65. The construction industry plays a central role in efforts to mobilize human resources in every country. The building sector offers more prospects of employment for rural migrants arriving in the urban areas. There is no reason why those migrants with the right aptitude should not be absorbed by the sector after appropriate training. The construction industry provides more than 10 per cent of employment in the formal sector and a substantial proportion of indirect employment.

66. The construction industry straddles both the public and private sectors of any country's economy. Most human activities involve some element of construction. Therefore, the industry generates a considerable volume of activities which often require very considerable investments. Moreover, the public sector and parastatal companies are the largest clients of the construction industry since they produce capital goods and provide services. The construction industry contributes considerably to capital formation and to the domestic product.

67. In spite of the substantial contribution of the sector, it is a well known fact that there is a shortage of adequate manpower, in particular the skilled personnel required to meet the demands of the sector. In order to improve the situation, the training of skilled workers and supervisors should be encouraged.

68. Most African Governments have set up technical schools and manual trades institutes for providing training in several fields particularly those connected with the construction industry. While the curriculum of those schools is appropriate, there are sometimes problems in providing the right career guidance for the trainees. In some instances, graduates from those schools do not consider themselves as manual workers contributing to direct production but as supervisors for other workers who did not receive the same type of training. Obviously, this view is contrary to the purpose of their training. Furthermore, in most developing countries, workers are not paid according to their actual output but rather to the qualification they have and this has discouraged many

candidates from opting for skilled manual work. According to Kunle Ade Wahab 2/, the objectives of such a training programme should be:

(a) To enhance the productivity of skilled workers who have not yet mastered their craft or who still have to acquire new techniques to increase their present output;

(b) To propagate new technologies so as to accelerate the development of the construction sector;

(c) To provide the trainees with an extensive knowledge of appropriate techniques and of the basic principles of their trade;

(d) To help the trainees become responsible and mature craftsmen by instilling in them a sense of pride in their job.

Apart from the training provided at vocational training centres, it would be advisable to develop other support programmes likely to produce additional manpower. Those programmes could be carried out by strengthening traditional systems of apprenticeship and on-the-job training.

69. Most skilled workers in Africa today were trained under the traditional system of apprenticeship. For some time to come this is the system that is likely to prevail. The system should, however, receive support and assistance from authorities in order to monitor how it operates.

70. With respect to on-the-job training, one fairly large enterprise or a group of enterprises could set up a training course for skilled workers in line with the requirements of those enterprises. The enterprises concerned would cover the costs of such training. The programmes should be similar to those taught at vocational training centres.

71. If the above recommendations on vocational training programmes are applied to the latter, there should be enough skilled workers in the construction industry.

VII. CONCLUSIONS AND RECOMMENDATIONS

72. There is no doubt that the experience of most African countries during the first two decades of independence has demonstrated the difficulties that African countries met within the implementation of their human settlement policies. Compared to efforts made in socio-economic planning, human settlements planning has not been accorded the attention it deserves.

73. The most serious obstacle to development is the stubborn belief that national space is homogenous, that there are equal opportunities for development and growth throughout any specific national territory and that national integration can be achieved solely through economic and social development plans. Human settlements planning has to be integrated with economic and social planning to achieve balanced development. The countries of the region need qualified staff to attain such integration. African States would therefore have to invest part of their resources in training personnel.

2/ Kunle Ade Wahab (1983); Specific Training Programme for the Provision of Construction Skills for the African Region.

74. Although some of them have established their own institutions, it would certainly be unwise for them to dissipate their resources. Training in human settlements obviously calls for multi-national co-operation. In order to establish such co-operation, the countries should show political initiative and work towards the establishment and utilization of joint training institutions for staff involved in human settlements planning. Unless such an initiative is taken, it is unlikely that national institutions to train human settlements planning personnel will ever be set up and managed on a profitable basis.

75. Despite the shortage of physical planners in most African countries, those available are sometimes under-utilized because they are either assigned other duties or sent to other departments where their skills are not always used. There is also the problem of integrating departments responsible for human settlements planning into the administrative and economic structures of African countries.

76. Most of Africa's human settlements training institutions are young; very few of them were established more than 20 years ago. They were often created with the assistance of developed countries and were based on models of developed country institutions; they have gradually begun to operate autonomously and must now endeavour to respond to the needs of African countries. As it was indicated earlier on, this has to be done taking into account the changing nature of African societies. In this endeavour close ties among educational institutions are desireable in order to foster exchanges of experience within the region. Obviously, professional sectors should be invited to participate in such exchanges of experience so that others could benefit from their organizational experience.

77. The training of planners and technicians working in the human settlements sector should reflect the socio-cultural and economic environment within which they will have to work. In that connection, training needs can be classified as follows:

(a) Training of specialists;

(b) Training of technicians or support staff;

(c) Refresher training and on-the-job training for specialists, municipal administrators, local community leaders and trainers.

78. Training programmes should be designed to cover the requirements of African countries, increase the productivity of workers, improve their skills and introduce new specializations to keep pace with the development of technology. To attain the foregoing objectives, the following action could be taken at the national, subregional and regional levels.

(a) <u>Action at the national level</u>

(i) National human settlements policies and programmes should identify staffing needs and establish priorities on training various categories of human settlements personnel;

(ii) National human settlements administrations should help to provide appropriate facilities for organizing on-the-job training programmes within engineering departments;

(iii) Vocational training centres should be established in each country to train masons, carpenters, plumbers, painters, electricians, plasterers and draughtsmen;

(iv) National liaison centres should be established to co-ordinate the activities of training and research institutes;

(v) Member States should take full advantage of the services available from international and regional organizations so as to develop, at the national level, the necessary means for manpower training as an integral part of planning with respect to socio-economic development ;

(vi) Member States should provide incentives to encourage human settlements specialists to remain in the public sector and to improve their performance thus playing their full role in the development of the national economy;

(vii) Member States should increase their co-operation and make use of the existing institutes in some African countries for training human settlements specialists.

(viii) African governments should encourage those students under training outside Africa to select as their thesis topics the problems that face their country or Africa in general;

(ix) Africans should be made aware of human settlements problems by including such questions on school and university curricula;

(x) Regular training seminars should be organized for municipal administrators and local community leaders.

(b) Action at the subregional and regional level

(i) On-the-job training seminars on human settlements should be organized for department and project officials;

(ii) Existing training programmes should be evaluated to make them more relevant to the requirements of African countries;

(iii) African Governments, Habitat and the United Nations Economic Commission for Africa should encourage regional and international co-operation in the area of human settlements. To that end, the following could be done:

- encouraging co-operation through the exchange of teaching programmes, students and research information

- establishing an interagency liaison bulletin which could also serve as a mechanism for disseminating information on research undertaken by the training institutions

(iv) Trainers in human settlements development should be trained in co-operation with relevant international training institutions;

(v) The United Nations Economic Commission for Africa should compile and publish a directory of human settlements training institutions indicating the training and research programmes that they offer and distribute the directory to member States of the Commission.

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